

DETAILED ACTION

Response to Arguments

On pages 6-7, applicant argues that Kalluri fails to disclose manipulating the first sub picture comprises replacing compressed blocks of the first sub picture with blocks of a different picture without changing the control data. While the applicant's points are understood, the examiner respectfully disagrees. See for example Kalluri column 11, lines 45-67. There Kalluri discloses the use of the MBAI LVC and the SCC or control data. Since Kalluri states that either the MBAI LVC or the SCC can be modified, the examiner is interpreting the control data to be the SCC which is not modified. Therefore the rejection has been maintained.

On pages 8-9, applicant requests references with the respect to the Official Notice rejections taken with regards to claims 6 and 14. Note the updated rejection below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3-5, 7-13, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohnishi (6075567) in view of Kalluri et al. (6931660), (hereinafter referred to as "Kalluri").

Regarding claim 1, Ohnishi discloses an apparatus that relates to an image code transform system (Ohnishi: column 1, lines 11-15). This apparatus comprises "generating a video signal comprising a plurality of sub pictures" (Ohnishi: figure 3, wherein the sub pictures are the small screen pictures), "dividing the first frame into uncompressed blocks such that each block comprises video only related to one sub picture" (Ohnishi: column 4, lines 40-45), and "generating a compressed signal by using a block based compression scheme" (Ohnishi: column 4, lines 50-62). However, this apparatus lacks the manipulation of control data as claimed. Kalluri teaches that it would be desirable to provide a simple and cost effect system for the simultaneous transmission of video (Kalluri: column 1, lines 61-67). To help alleviate this problem, Kalluri discloses "manipulating a first sub picture by manipulating the association of control data without modifying the compressed data" (Kalluri: column 11, lines 44-60, wherein the control data is the MBAI or SSC values) and "replacing picture blocks of the first sub picture with blocks of a different picture without changing the control data" (Kalluri: column 11, lines 45-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Ohnishi and add the processing taught by Kalluri in order to obtain an apparatus that can more easily transmit data over limited bandwidth networks.

Regarding claim 3, Kalluri discloses "associating the control data of a second sub picture with blocks of the first picture" (Kalluri: column 11, lines 45-67).

Regarding claim 4, Kalluri discloses "the control data comprises information related to the position of a sub picture" (Kalluri: column 10, lines 45-65).

Regarding claim 5, Kalluri discloses "selecting the blocks of the first picture by parsing the compressed signal to detect identification data" (Kalluri: column 10, lines 40-65, wherein the ID data is the SCC or MBAI).

Regarding claim 7, Kalluri discloses "each slice comprises a single block" (Kalluri: column 10, lines 45-67, wherein the slice can be a varying size).

Regarding claim 8, Kalluri discloses "each slice comprises a number of compressed blocks corresponding to a width of a picture" (Kalluri: column 10, lines 55-67, wherein the width is the horizontal positioning).

Regarding claim 9, note the examiners rejection for claims 1 and 8.

Regarding claim 10, Kalluri discloses "manipulating the first picture comprises manipulating a position of the first picture by modifying the control data" (Kalluri: column 11, lines 45-60).

Regarding claim 11, Kalluri discloses "performing a shifting operation" (Kalluri: column 11, lines 45-50, wherein the shifting is the relocating).

Regarding claim 12, Kalluri discloses “manipulating the vertical position of the picture by modifying slice numbers” (Kalluri: column 11, lines 45-60, wherein the MBAI and SCC indicate the slice numbers).

Regarding claim 13, Kalluri discloses “replacing blocks with pre defined blocks without modifying the control data” (Kalluri: column 11, lines 45-60).

Regarding claim 15, Kalluri discloses “the displacement is user-controllable” (Kalluri: column 11, lines 11-15).

Regarding claims 16-17, note the examiners rejection for claim 1.

2. Claims 6 and 18-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Ohnishi (6075567) in view of Kalluri et al. (6931660), (hereinafter referred to as “Kalluri”) in further view of Saukkonen (6141053).

Regarding claim 6, Kalluri discloses “the signal comprises slices each having a header (Kalluri: column 10, lines 50-55). However, claim 6 differs from claim 1 in that claim 6 further requires the number of consecutive compressed blocks. Saukkonen teaches that prior art processing devices incur unnecessary connection costs (Saukkonen: column 3, lines 1-5). To help alleviate this problem, Saukkonen discloses “a number of consecutive compressed blocks” (Saukkonen: column 3, lines 20-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the number of blocks taught by Saukkonen in order to obtain an apparatus that better helps eliminate unnecessary connection costs.

Regarding claim 18, note the examiners rejection for claims 1 and 6.

Regarding claim 19, note the examiners rejection for claim 1.

Regarding claims 20-21, note the examiners rejection for claims 3-4.

3. Claim14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohnishi (6075567) in view of Kalluri et al. (6931660), (hereinafter referred to as “Kalluri”) in further view of Yokoyama (6058212).

Regarding claim 14, note the examiners rejection for claim 1, and in addition, claim 14 differs from claim 1 in that claim 14 further requires setting the motion vectors to the same value. Yokoyama teaches that prior art encoding devices produce images with large amounts of distortion (Yokoyama: column 1, lines 45-58). To help alleviate this problem, Yokoyama discloses “all block vectors are set to a same value which depends on a displacement of the picture” (Yokoyama: column 9, lines 16-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the motion vector processing taught by Yokoyama in order to obtain an apparatus that helps eliminate distortion from the video signal.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CZEKAJ whose telephone number is (571)272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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